The Third Wave of Cognitive Behavioural Therapies

What Is New and What Is Effective?

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Abstract and Introduction

Abstract

Purpose of review: The purpose of this study was to shortly characterize the evolving psychotherapeutic methods summarized as 'third wave psychotherapies' and to review recent research on the therapeutic impact of these methods.

Recent findings: 'Third wave psychotherapies' comprise a heterogeneous group of treatments, including acceptance and commitment treatment, behavioural activation, cognitive behavioural analysis system of psychotherapy, dialectical behavioural therapy, metacognitive therapy, mindfulness-based cognitive therapy and schema therapy. Several randomized controlled trials, longitudinal case series and pilot studies have been performed during the past 3–5 years, showing the efficacy and effectiveness of 'third wave psychotherapies'.

Summary: The third wave of behavioural psychotherapies is an important arena of modern psychotherapy. It has added considerably to the spectrum of empirically supported treatments for mental disorders and influenced research on psychotherapy. The presented methods open up treatment possibilities for patient groups such as borderline personality disorder, chronic depression or generalized anxiety disorder that had received only little specific attention in the past. The available evidence now allows considering all third wave treatments as empirically supported.

Introduction

Behaviour therapy has its roots in the 1950s. The characteristic feature of this so-called 'first wave' was a focus on classical conditioning and operant learning. The 'second wave' was characterized by a focus on information processing. Second wave (classical) cognitive therapy is at present the dominant contemporary system of psychotherapy worldwide. A recent review summarizes more than 75 clinical trials for cognitive therapy for unipolar depression that show that this treatment is superior to placebo, equivalent to other bona fide treatments and antidepressive pharmacotherapy. In addition, cognitive therapy seems to be superior to pharmacotherapy and similar to other psychotherapies in its effectiveness in reducing the risk of relapse after discontinuation of treatment. Yet, after more than 45 years of experience with cognitive therapy, there is also a growing awareness of its limitations: first – similarly to other treatments for mental disorders – effect sizes are limited, leaving room for improvement; second, treatments are not universally found acceptable by their users; and third, data are missing that support the necessity of interventions aimed at a content-oriented cognitive change which are core elements of classical cognitive therapy. A review found little evidence that specific content-oriented cognitive interventions such as challenging dysfunctional thoughts significantly increase the effectiveness of cognitive therapy. A component analysis indicates that the efficacy of cognitive therapy depends critically on behavioural activation as only intervention. The 'third wave' of behavioural therapies is characterized by themes new to behavioural psychotherapies: metacognition, cognitive fusion, emotions, acceptance, mindfulness, dialectics, spirituality and therapeutic relationship. The techniques used in third wave methods are quite heterogeneous. Commonalities are the abandonment or cautious use of content-oriented cognitive interventions and the use of skills deficit models to delineate the core maintaining mechanisms of the addressed disorders. A further aspect is a renaissance of first wave principles such as operant conditioning.

Review

The present review focuses on relevant randomized controlled studies after 2007, selected uncontrolled studies
and selected studies relevant to basic underlying concepts. A meta-analysis of the evidence until 2007 was published by Ost.[7]

Acceptance and Commitment Treatment

Acceptance and commitment therapy (ACT)[8] is a method of behavioural therapy that is based on functional contextualism and the relational frame theory. It posits the following psychopathological processes as central to mental disorders: (1) cognitive fusion; (2) experiential avoidance; (3) attachment to a verbally conceptualized self and a verbally conceptualized past; (4) lack of values or confusion of goals with values; and (5) absence of committed behaviour that moves in the direction of chosen values. The treatment contains psychoeducation about key mechanisms, exercises in mindfulness and cognitive defusion. The value orientation of the patient is elicited and discussed, and patients are supported in value-driven behaviour in contrast to behaviour driven by emotional or experiential avoidance.[9]

There are several randomized controlled trials (RCTs) to test the efficacy of ACT in heterogeneous clinical conditions. ACT was associated with a reduction of depressive symptoms in men and women with subclinical depression.[10] ACT was superior to progressive relaxation training in reducing symptoms of obsessive compulsive disorder in 79 patients.[11] In substance use disorders, ACT-based psychotherapy combined with bupropione significantly improved smoking cessation compared with bupropione alone (quit rates: 31.6 versus 17.5%).[12] Interestingly, ACT has also been shown to reduce shame in patients with substance use disorders after a 4-month follow-up period, associated with reduced substance use.[13] In 116 patients with nonmalignant pain, an 8-week group therapy was as effective as cognitive behavioural therapy in reducing pain interference and pain-related mood symptoms.[14] An RCT in ACT also addressed nonclinical populations. ACT has been tested versus psychoeducation to promote physical activity in adults.[15] Healthy adult persons randomized to ACT were more likely to improve their physical activity, pointing to short-term effects of ACT in lifestyle changes. ACT has been shown to be effective in reducing levels of stress and burnout in Swedish social workers (n = 106).[16]

Also, several longitudinal studies, case series and pilot studies were published, pointing to usefulness of ACT in pain,[17] eating disorders,[18,19] marijuana dependence,[20] methadone reduction,[21] generalized anxiety disorder,[22] and affective symptoms in psychotic disorders.[23]

Behavioural Activation

Behavioural activation is a third wave method for treating depression and other mental disorders. It emerged from studies analysing the necessary components of classical cognitive therapy.[4,5,24] These studies showed that behavioural activation is a stand-alone component that has a similar or superior efficacy compared with cognitive therapy. Behavioural activation has evolved from a long behavioural tradition seeking to increase positive reinforcement by scheduling appropriate patient behaviours and thus achieving antidepressant action. Important changes compared with earlier versions are a shift from ‘pleasant’ activities to value-driven activities, a shift strongly influenced by ACT and the adoption of the concept of ‘opposite action’ from dialectical behavioural therapy (DBT).[25] The goal is to bring the patient into contact with diverse, stable and valued sources of positive reinforcement. Behavioural activation encompasses psychoeducation, activity monitoring, scheduling of antidepressant activities and troubleshooting.

The follow-up of an RCT showed that behavioural activation and cognitive therapy had similar enduring effects, which were as efficacious as continuous treatment with medications.[4] An RCT combining behavioural activation strategies with cessation treatment for smokers with elevated depressive symptoms not only showed that this treatment leads to higher rates of abstinence than standard smoking cessation treatment but also that depressive symptoms were lower during the follow-up period.[26] An RCT in geriatric psychiatric inpatients showed a greater reduction in depressive symptoms with behavioural activation than in a control condition.[27] An RCT in female patients with breast cancer and major depression compared behavioural activation and problem-solving therapy.[28] Large effect sizes were observed in both treatments with similar rates of remission and response. A small pilot study points to good effectiveness of behavioural activation also in atypical depression.

Cognitive Behavioural Analysis System of Psychotherapy
The cognitive behavioural analysis system of psychotherapy (CBASP) was specifically developed for the treatment of patients with chronic depression. CBASP assumes that skills deficits in the area of operational thinking lead to a failure of interpersonal behaviour and subsequent depression.\[29,30\] The method comprises three therapeutic techniques: situational analysis, interpersonal discrimination exercise and consequating strategies, all with the aim of teaching operational thinking and interpersonal behaviour driven by empathy and personal values.

The fundamental assumption of a preoperative cognitive style in chronic depressed patients is supported by one study,\[31\] demonstrating that preoperative thinking is more pronounced in patients with chronic depression than in patients with episodic depression and healthy volunteers.

In the Research Evaluating the Value of Augmenting Medication with Psychotherapy study, an RCT with over 800 depressed patients, CBASP, brief supportive psychotherapy and optimized pharmacotherapy were equivalent as augmentation strategies.\[32\] The study has been criticized because of potential methodological problems. In particular, only those patients were included who had consented to a pharmacotherapy-only study and had not achieved remission; patients received only a mean of 12.7 CBASP sessions, and patients with substance-related disorder were enrolled if they did not require detoxification. This may hint at insufficient motivation or inadequate implementation of the intervention. However, social problem solving was significantly improved in CBASP treated patients and predicted a change in depressive symptoms over time.\[33\]

Dialectical Behavioural Therapy

Dialectical behavioural therapy was originally developed for parasuicidal patients with borderline personality disorder (BPD).\[34\] Modifications have now been developed for substance abuse and eating disorders. DBT assumes that skills deficits in the area of emotion regulation are at the centre of these disorders. Accordingly, DBT teaches a broad spectrum of skills in the areas of mindfulness, distress tolerance, emotion regulation and interpersonal effectiveness.\[35,36\]

The skills deficit model underlying DBT was supported in a study showing that the extent of skills use mediated the effects of DBT and led to decreased suicidal behaviour, decreased depression and better anger control.\[37\] DBT has been shown to result in a positive therapeutic relationship and to impact substantially intrapsychic and personality factors, not merely reducing symptoms.\[38\]

An RCT showed comparable improvements in suicidal behaviour, BPD psychopathology and healthcare utilization when DBT was contrasted with a general psychiatric management performed by community experts delivering psychodynamic therapy and symptom-targeted pharmacotherapy.\[39\] Another RCT compared DBT with standard group therapy, demonstrating greater clinical improvements and lower dropout rates.\[40\]

Metacognitive Therapy

Metacognitive therapy (MCT)\[23\] evolved from classical cognitive therapy. Metacognition is the aspect of cognition that controls mental processes and thinking. Knowledge about metacognition originated in research on learning and decision-making in children. MCT posits that the cognitive attentional syndrome, a psychopathological state consisting of repetitive cognitive processes such as worrying, rumination, dysfunctional threat monitoring and dysfunctional cognitive and behavioural coping, is at the core of depressive and anxiety disorders. MCT abstains from content-oriented interventions, uses attention training techniques to develop skills in cognitive flexibility, teaches a special form of mindfulness (detached mindfulness) and guides cognitive and behavioural experiments to change metacognition.

The underlying concept of MCT is that metacognitions must change in order for psychological treatment to be effective. This assumption was supported by a study\[41\] showing that change in metacognitions was a better predictor of outcome than change in cognitions in patients with obsessive compulsive disorder treated with exposure or response prevention techniques.

An RCT including 126 patients compared MCT, intolerance-of- uncertainty therapy and a waiting list in the treatment of general anxiety disorder.\[42\] MCT in this study produced significantly better outcome on most outcome variables; remission rates were similar in both treatments. A smaller RCT including 20 patients
compared MCT with relaxation equally in the treatment of general anxiety disorder. MCT was superior both at posttreatment and at 12-month follow-up. An uncontrolled trial investigating MCT in the management of treatment-resistant depression showed high remission rates.

Mindfulness-based Cognitive Therapy

Mindfulness-based cognitive therapy (MBCT) arose from experiences in the application of Buddhist meditation techniques in medicine. It was specifically developed to reduce the number of relapses in patients with major depression. MBCT uses psychoeducation and encourages the patients to practice mindfulness meditation. A core goal is to develop metacognitive awareness, which is the ability to experience cognitions and emotions as mental events that pass through the mind and may or may not be related to external reality. The focus is not to change 'dysfunctional' thoughts but to learn to experience them as internal events separated from the self.

An RCT compared rates of relapse in remitted depressed patients, treated with either antidepressant maintenance treatment, placebo or MBCT only. Relapse rates were similar in both treatment groups and lower than in placebo. Another RCT comparing only antidepressant maintenance with MBCT found a trend towards lower relapse rates with MBCT. An RCT comparing MBCT in recovered patients with major depression with treatment as usual found better outcome with MBCT, i.e. lower relapse rates. In contrast to the earlier focus on relapse prevention, recent studies examined the impact of MBCT on current and treatment-resistant depression, and on other psychiatric disorders such as substance use disorders. In a current nonmelancholic depressive episode, MBCT was similarly effective to cognitive therapy. In the treatment of chronic depression, MBCT was superior in response rates to treatment as usual. A modified programme based on MBCT strategies was tested in patients with substance use disorders after intensive stabilization; most of them were diagnosed with alcohol dependence. One hundred and sixty-eight study participants were randomized to either 8 weekly sessions of mindfulness-based relapse prevention (MBRP) or treatment as usual. MBRP was effective in reducing the days with alcohol or drug use during the 4-month follow-up period. This effect was mediated by altered emotional and behavioural responses to depressive symptoms in the MBRP group.

Schema Therapy

Schema therapy was originally developed for the treatment of personality disorders and other chronic mental disorders. Schema therapy is derived from classical cognitive therapy; yet, compared with cognitive therapy, it has substantially elaborated the concept of schemata and modes. It comprises a large spectrum of techniques to address emotions, cognitions and behaviour in the present life of the patient, within therapy and related to events and experiences in the past. Schema therapy is integrative in the sense that it uses emotion activation techniques originating in Gestalt and Psychodrama; yet, it is strictly behavioural in the models communicated to the patient. One of the dominant skills trained in schema therapy is to recognize the present dysfunctional modes of functioning, such as the detached protector mode, and to have behaviour guided by the healthy adult mode.

An RCT comparing schema therapy with transference focused psychotherapy in borderline personality disorder showed better cost-effectiveness of schema therapy. An RCT including 32 patients with borderline personality disorder compared schema therapy group with treatment as usual. Remission rates in schema therapy were clearly superior. An RCT comparing schema therapy with and without telephonic crisis support in patients with borderline personality found high remission rates but no additional benefit of the crisis support.

Summary and Conclusion

Ost in 2008 concluded that 'no third wave therapy fulfils the criteria for empirically supported treatments'. Yet, if we apply the criterion that a psychotherapy method should be supported by at least two RCTs of sufficient size and quality showing superiority to waiting list or treatment as usual or similar effects to another bona fide treatment and that there should be additional evidence supporting the method and no evidence pointing to relevant harmful effects, the present review shows that all third wave therapies with the exception of CBASP fulfil these minimal entry criteria. And it is highly probable that, with the publication of the yet unpublished data, CBASP will also follow. So, there is little doubt that the presented third wave methods are principally efficacious.

The next question is: are third wave therapies superior to classical cognitive therapy? This question is difficult to
answer, as extensive research shows that superiority among bona fide treatments is difficult or impossible to establish.\[58\] This is related to methodological and time constraints and should not be translated to 'it doesn't matter what I do as long as the therapeutic alliance is good' and should not lead to a cynical attitude towards the necessity of methodological innovation in psychotherapy ('old wine in new bottle'). Certainly, it can be debated whether on a technical level differences of similarities to classical cognitive therapy prevail.\[59\]

Beyond the debate about effect sizes, the following aspects merit attention when reflecting on the third wave.

How close are the methods linked to science in related areas? Many aspects of the third wave are based on basic research in psychological mechanisms and reflect its current status better than classical cognitive therapy. For example, current research in the importance of metacognition, thought and emotion suppression,\[60\] worry, rumination or experiential avoidance\[61\] has deeply influenced MCT, ACT, MBCT, DBT and schema therapy. All third wave methods have strong roots in learning theory. Particularly, ACT and behavioural activation have a strong emphasis on the topic of values, goals and behaviour. CBASP is strongly influenced by developmental psychology and interpersonal theory.

How well are the new methods received by the patients? There is little research on this subject. Yet, indirect conclusions can be drawn from the fact that attrition rates in 'difficult' patient groups such as borderline personality disorder are lower in DBT and schema therapy than in traditional psychotherapy and are considerably lower in MBCT than in pharmacotherapy. Optimistically stated, it can be said that the third wave has opened up psychotherapy as a possibility for groups that before had little access to psychotherapy.

The dissemination of new psychotherapy methods lives on the subjective experience of the involved psychotherapist to perform better or to deal better with situations that seemed insurmountable before. The development of therapist preference for a method is certainly subject to bias. The equation that the preferred methods are the best methods must be critically examined. Still, the perspective of therapists having hands-on experience with several methods of psychotherapy merits scientific attention.

What are the limitations of the third wave methods? Despite the impressive increment of knowledge in the last years, the third wave methods still lag behind classical cognitive therapy in the extent of its evidence base. To name a few important gaps: there is no study in the application of ACT to patients with severe depression, and there is no substantial evidence for schema therapy outside the treatment of patients with borderline personality disorder. A second successful RCT in CBASP is missing.

Conclusion

The third wave of behavioural psychotherapies is an important arena of modern psychotherapy development. It has added considerably to the spectrum of empirically supported treatments for mental disorders. The presented methods include a diversity of new techniques and open up possibilities for patient groups such as borderline personality disorder, chronic depression or generalized anxiety disorder that had received only little specific attention in the past. The available evidence now allows all third wave treatments to be considered as empirically supported. Still, compared with classical cognitive therapy, there is an enormous deficit in the amount of evidence.

Sidebar

Key Points

- Third wave or new wave psychotherapy refers to a heterogeneous spectrum of psychotherapy methods that have proven to be effective, in particular in patients who were formerly seen as difficult to treat.

- Third wave psychotherapies have expanded the methodological and technical spectrum and are still influencing the development of psychotherapy.

- Several randomized controlled trials have been performed during the last years, allowing it to be considered that third wave psychotherapies are empirically supported.
There are no studies supporting the assumption that either psychotherapy (third wave versus second wave) or classical cognitive behavioural therapy (CBT) is superior over the other. However, attrition rates are different between psychotherapies, with a trend for better acceptance of third wave treatments in particular patient groups.

References


•An important RCT on the effects of ACT in depression.


• This work shows the generalizability of ACT to nonclinical settings.


• This work shows that modern concepts of behavioural activation are effective.


Kocsis JH, Gelenberg AJ, Rothbaum BO, et al. Cognitive behavioral analysis system of psychotherapy and


• MCT is currently one of the sparse psychotherapeutic methods that have proven efficacy in treatment-resistant depression.


• An important work showing the efficacy of MBCT versus pharmacotherapy in relapse prevention.

Acknowledgements

Papers of particular interest, published within the annual period of review, have been highlighted as:

• of special interest
•• of outstanding interest

Acknowledgements
None.